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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/696,491	10/29/2003	Jeffrey M. Sieracki	1023-228US01	5730	
28863 7590 01/30/2008 SHUMAKER & SIEFFERT, P. A. 1625 RADIO DRIVE SUITE 300 WOODBURY, MN 55125			· EXAM	· EXAMINER	
			NGUYEN, PHU K		
			ART UNIT	PAPER NUMBER	
			2628		
	•	•			
	•	• •	NOTIFICATION DATE	DELIVERY MODE	
			01/30/2008	ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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		Application No.	Applicant(s)		
Office Action Summary		10/696,491	SIERACKI ET AL.		
		Examiner	Art Unit		
		Phu K. Nguyen	2628		
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the c	orrespondence address		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1)[[]	Responsive to communication(s) filed on <u>17 O</u>	ctober 2007.			
•		action is non-final.			
,—	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
٠,١	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
Dispositi	on of Claims				
·		67 68 70 and 71 is/are pending in	n the application		
-	4)⊠ Claim(s) <u>1-7,9-19,21-32,34-44,46,48-56,58-65,67,68,70 and 71</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.				
	5) Claim(s) is/are allowed.				
•	5)				
•	Claim(s) is/are objected to.	, <u>07-00,70-77</u> 13/416 rejected.			
	Claim(s) are subject to restriction and/o	r election requirement			
٥/ك	ciamila) are subject to restriction and/o	i cicolion roquiromoni.			
Applicati	on Papers				
9)[The specification is objected to by the Examine	r.			
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.					
	Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	37 CFR 1.85(a).		
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority u	ınder 35 U.S.C. § 119				
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:					
1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.					
Attachmen	t(s)		PHU K. NGUYEN PRIMARY EXAMINER GROUP 2300		
_	e of References Cited (PTO-892)	4) Interview Summary			
2) Notic	e of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ate		
	nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date	5) Notice of Informal P 6) Other:	atent Application		

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-7, 9-19, 21-32, 34-44, 46, 48-56, 58-65, 67-68, 70-71 are rejected under 35 U.S.C. 103(a) as being unpatentable over HERNANDEZ (6,654,072) in view of NORTH et al. (Patient-Interactive, Microprocessor-Controlled Neurological Stimulation System).

As per claim 1, Hernandez teaches the claimed "method comprising "sequentially displaying a plurality of two-dimensional body templates, each of the body templates illustrating a view of an external surface of a body rotated an angle about an axis" (Hernandez, column 1, lines 27-32; an object data includes several view projections such as a top view, a left view, ... which can be sequentially selected for display by a user; column 3, lines 64-67; column 4, lines 2-5); "receiving input from a user indicating a region of one of the body template" (Hernandez, column 4, lines 10-20; a selected feature in a particular view will also be showed in the remaining views of the projections), "regenerating the body template to illustrate the indicated region on the template; and displaying the regenerated body template" (Hernandez, column 4, lines 40-65). It is noted that Hernandez does not teach a "human" object as claimed. However, a human object with its 2D projections is well known in the art (North, figure 3, page 189). It would have been obvious in view of the teaching of North's 2D projections of a human object to configure Hernandez' method as claimed because Hernandez'

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object can be a complex object represented by a mesh of polygons such as a human object (Hernandez, column 6, lines 40-44).

Claim 2 adds into claim 1 "wherein the plurality of body templates comprises a front view template and a back view template" (Hernandez, column 3, lines 64-67).

Claim 3 adds into claim 1 "wherein the plurality of body templates comprises a front view template, a right-side view template, a back view template, and a left-side view template" (Hernandez, column 1, lines 28-32; column 3, lines 64-67).

Claim 4 adds into claim 1 "wherein the regenerated body is a first one of the body templates that illustrates a portion of the surface, and generating a second one of the body template to illustrate at least some of the portion of the surface illustrated by the first one of the body templates and at least a portion of the region indicated by the user, and displaying the second one of the body templates" (Hernandez, column 6, lines 1-34; the different projected views of the object are available in the memory and therefore can be sequentially displayed by a user; column 4, lines 2-5).

Claim 5 adds into claim 1 "wherein sequentially displaying the body templates comprises sequentially displaying the body templates according to commands received from a user" (Hernandez, column 4, lines 2-5).

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Claim 6 adds into claim 5 "wherein sequentially displaying the body templates according to commands received from a user comprises displaying the body templates according to commands received via at least one direction arrow" (Hernandez, the selection of isometric views in Sheet 1 of figure 2 by the cursor 25).

Claim 7 adds into claim 5 "displaying a first one of body templates; receiving a command from the user; generating a second one of the body templates according to the command; and displaying the second one of the body templates" (Hernandez, given the availability of the projections, the user can sequentially select for display the data of the isometric views in Sheet 1 of figure 2 by the cursor 25).

Claim 9 adds into claim 1 "sequentially displaying the body templates comprises sequentially displaying the body templates via a display, and receiving input from a user comprises receiving input from the user via the display" (Hernandez, the selection of isometric views in Sheet 1 of figure 2 by the cursor 25; given the availability of the projections, the user can sequentially select for display the data of the isometric views in Sheet 1 of figure 2 by the cursor 25).

Claim 10 adds into claim 1 "wherein sequentially displaying the body templates comprises: displaying a first one of the body templates; generating a second one of the

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body templates to illustrate a view of the external surface of the human body, wherein the angle of rotation of the surface about the axis is based on the proximity of the received body region indication to an edge of the first one of the body templates; and displaying the second one of the body templates" (Hernandez, column 6, lines 1-34; the different projected views of the object are available in the memory and therefore can be sequentially displayed by a user; column 4, lines 2-5; the angle of rotations are inherent from the top, bottom, left, right, front, back views; column 3, lines 64-67).

Claim 11 adds into claim 1 "the input comprises a two-dimensional polygon outline of the indicated region" (Hernandez, column 6, lines 2-40).

Claim 12 adds into claim 1 "mapping the input to a body surface coordinate system that describes the external surface of the body" (Hernandez, column 4, lines 10-50).

Claim 13 adds into claim 12 "generating each of the body templates based on the body surface coordinate system" (Hernandez, column 4, lines 10-50).

Claim 14 adds into claim 12 "the body surface coordinate system comprises a three-dimensional coordinate system" (Hernandez, 3D viewer).

Claim 15 adds into claim 14 "generating the three-dimensional coordinate system

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by applying one of a linear interpolation, a higher-order interpolation, or a spline technique to determine valid body coordinates" which are just mere design choice (Applicant does not provide any specific technique in Disclosure), and would have been obvious in view of Hernandez's 3D object display (Hernandez, column 6, lines 41-44).

Claim 16 adds into claim 14 "mapping the input into a three-dimensional body surface coordinate system comprises assigning a third coordinate to each point of the indicated region of the body template" (Hernandez, the selected feature are showed in the other projections and the 3D viewer; column 4, lines 37-40).

Claim 17 adds into claim 12 "wherein the body surface coordinate system comprises a two-dimensional coordinate system" (Hernandez, the 2D isometric projections; column 3, lines 64-67).

Claim 18 adds into claim 17 "generating the two-dimensional coordinate system by mathematically peeling and flattening a representation of the external surface of the human body, and indicating continuity at edges of the body surface" which are just mere design choice (Applicant does not provide any specific technique in Disclosure), and would have been obvious in view of Hernandez's 2D isometric projections (Hernandez, column 3, lines 64-67).

Claim 19 adds into claim 17 "displaying the regenerated body template

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comprises projecting the two-dimensional coordinate system onto a three-dimensional

frame representation of the external surface of the human body" (Hernandez, the 3D

viewer; column 4, lines 37-40).

Claim 21 adds into claim 1 "wherein regenerating the one of the body templates to

illustrate the indicated region on the template comprises regenerating the one of the

body templates to include shading of the indicated region on the template" (Hernandez,

the highlight of the surfaces).

Claim 22 adds into claim 1 "wherein the body region indication indicates a region

of at least one of pain or paresthesia experienced by a patient" (North, figure 3, page

189).

Claim 23 adds into claim 1 "wherein the user comprises one of a patient or a

clinician" (North, Introduction, page 185).

Claim 24 adds into claim 1 "wherein the axis comprises a vertical axis through a

center of the human body" (Hernandez, the isometric projections inherently imply the

axis of the XYZ coordinate system).

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Claim 25 adds into claim 1 "wherein each of the body templates illustrates a view of the external surface of the human body rotated an angle about at least one of a plurality of axes" (Hernandez, the isometric projections inherently imply the rotation around the axis of the XYZ coordinate system).

Claims 26-32, 34-44, 46, 48-56, 58-65, 67-68, 70-71 claim a computer readable medium and a system to perform the steps of methods in claims 1-7, 9-19, 21-25; therefore, they are rejected under a similar reason.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phu K. Nguyen whose telephone number is (571) 272 7645. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on (571) 272 7664. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Phu K. Nguyen January 12, 2008

PHU K. NGUYEN PRIMARY EXAMINER GROUP 2300

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